



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,074	04/14/2004	Ling Long Chen	03226/432001; SUN040758	7118
32615	7590	12/22/2009		
OSHA LIANG L.L.P./SUN TWO HOUSTON CENTER 909 FANNIN, SUITE 3500 HOUSTON, TX 77010			EXAMINER ARCOS, CAROLINE H	
			ART UNIT 2195	PAPER NUMBER
			NOTIFICATION DATE 12/22/2009	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

docketing@oshaliang.com
lord@oshaliang.com
hathaway@oshaliang.com

Office Action Summary	Application No. 10/824,074	Applicant(s) CHEN ET AL.	
	Examiner CAROLINE ARCOS	Art Unit 2195	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 04/14/2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. Claims 1-32 are pending for examination.

Continued Examination Under 37 CFR 1.114

2. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 11/09/2009 has been entered.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claim 9 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. The claim language on the following claim is not clearly understood:
 - i. As per claim 9, it is not clearly understood what are the criteria for deactivating the container.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-5, 7-8, 11-12, 14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1) and further in view of Riddle (US 7,406,522 B2).

5. As per claim 1, McCarthy teaches the invention substantially as claimed including a method for managing system resources, comprising:

creating a container, wherein creating the container comprises allocating a first portion of a first resource of the computer system to the container, wherein the computer system comprises a plurality of sets of processors (abs., lines 9-14; par. [0025], lines 1-12; par. [0026]; par. [0041]);

associating the container with a resource pool, wherein the resource pool is associated with one of the plurality of sets of processors and is allocated a portion of the first resource the associated container resides in the resource pool along with a different container, wherein the different container is allocated a second portion of the first resource (fig. 2A, 203-1,203-2; par. [0041]; par. [0049], lines 1-7);

determining whether the first portion of the first resource allocated to the container is valid (par. [0027], lines 1-16; par. [0036]; par. [0044]).

Wherein the first portion of the first resource allocated to the container is valid when the first portion of the first resource allocated to the container does not exceed the portion of the first resource allocated to the resource pool (par. [0036]; par. [0038]; par. [0038]; par. [0044]); and activating the container only if the first portion of the first resource is valid (par. [0036]; par. [0044]; wherein if the required resources is met then the partition is activated/operable).

6. McCarthy doesn't explicitly teach the plurality of resource pools and the container enables at least one system user to use the container.

7. However, Waldspurger teaches a plurality of resource pools (col. 5, lines 44-48; col. 6, lines 8-15; col. 7, lines 46-60; col. 8, lines 1-50; fig. 1, VMM1-VMMn).

8. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of McCarthy of logical partition and resource allocation and Waldspurger teaching of system resource virtualization through the use of VMM would allow the system to expand to show the possibility of having more resource pools and more partition that can further allocate resource.

9. The combined teaching of McCarthy and Waldspurger does not explicitly teach the container enables at least one system user to use the container.

Art Unit: 2195

10. However, Riddle teaches the container enables at least one system user to use the container (abs.; col. 3, lines 5-41; col. 5, lines 36-42; col. 7, lines 1-26).

11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger and Riddle because Riddle teaching of container enables at least one system user to use the container would improve the use of the container resource that was allocated to the resource through the usage of the enabled user.

12. As per claim 2, McCarthy teaches executing a project within the container once the container is active (par. [0004], lines 6-14).

13. As per claim 3, McCarthy teaches collecting statistics corresponding to the executing of the project in the container (par. [0031], lines 1-5; par. [0032], lines 1-16).

14. As per claim 4, McCarthy teaches that triggering an alert if the project executing within the container attempts to use more than the first portion of the first resource (par. [0035], lines 8-23; par. [0036], lines 6-7).

15. As per claim 5, McCarthy teaches that the project does not use more than the first portion of the first resource while executing in the container (par. [0045], lines 5-6).

Art Unit: 2195

16. As per claim 7, McCarthy teaches allocating a third portion of the first resource to the container, if the first portion of the first resource allocated to the container is not valid (par. [0023], lines 1-16; par. [0024], lines 1-4; par. [0027], lines 14-23);

determining that the third portion of the first resource allocated to the container is valid when the third portion of the first resource allocated to the container does not exceed the portion of the first resource allocated to the resource pool (par. [0027], lines 1-16); and

based on determining that the third portion of the first resource allocated to the container is valid, activating the container if the second portion of the first resource allocated to the container is valid (fig. 3,310; par. [0036]).

17. As per claim 8, McCarthy teaches allocating a first portion of a second resource of the computer system to the container determining whether the first portion of the second resource allocated to the container is valid (par. [0025], lines 1-12; par. [0026]); par. [0027], lines 1-16; par. [0041], lines 11-18; par. [0044]).

18. As per claim 11, McCarthy teaches modifying the first portion of the first resource after the container is activated (par. [0023], lines 1-5; par. [0027], lines 15-23; par. [0035], lines 8-15; par. [0036], lines 1-4).

19. As per claim 12, McCarthy teaches wherein modifying the first portion of the first resource comprises modifying a container definition of the container (par. [0052]).

Art Unit: 2195

20. As per claim 14, McCarthy teaches specifying a project associated with the container, wherein the project corresponds to a plurality of processes (par. [0004], lines 7-14; par. [0033], lines 6-10).

21. As per claim 16, McCarthy teaches that the first resource is at least one selected from the group consisting of physical memory, and bandwidth (par. [0025]; par. [0041], lines 11-18).

22. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1) and further in view of Riddle (US 7,406,522 B2), as applied to claim 1 above, and further in view of Krishnaswami et al. (US 2005/0091346 A1).

23. As per claim 6, McCarthy teaches the project is placed in the container by a user (par. [0005], lines 1-5).

24. The combined teaching of McCarthy, Waldspurger and Riddle doesn't explicitly teach the user is listed on an access control list associated with the container. However, Krishnaswami teaches the user is listed on an access control list associated with the container (par. [0059], lines 1-10).

25. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Riddle and Krishnaswami because

Art Unit: 2195

Krishnaswami teaching of the user is listed on an access control list associated with the container would improve system security and system efficiency since it control the access of which user can modify the container, this technique would prevent the system from unwanted intruders that can harm the system.

26. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1) and further in view of Riddle (US 7,406,522 B2), as applied to claim 1 above, and further in view of Ham et al. (US 2004/0158834 A1).

27. As per claim 9, the combined teaching of McCarthy, Waldspurger and Riddle doesn't explicitly teach deactivating the container, wherein deactivating the container comprises releasing the first portion of the first resource from the container.

28. However, Ham teaches deactivating the container, wherein deactivating the container comprises releasing the first portion of the first resource from the container (abs., lines 2-7; fig. 7, element 740).

29. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Riddle and Ham because ham teaching of deactivating the container comprises releasing the first portion of the first resource from the container would improve system performance and efficiency in usage of shared resources by

Art Unit: 2195

reclaiming the resources allocated by one of the container in case the container is idle, dead or failed and allocating the shared resources to other containers that are in need of the resources.

30. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1), in view of Riddle (US 7,406,522 B2), in view of Ham et al. (US 2004/0158834 A1) as applied to claim 9 above and further in view of Nguyen et al. (US 6,609,213 B 1).

31. As per claim 10, the combined teaching of McCarthy, Waldspurger, Riddle and Ham doesn't explicitly teach transferring the project executing the container to a default container if the container is deactivated; and executing the project in the default container.

32. However, Nguyen teaches transferring the project executing the container to a default container if the container is deactivated; and executing the project in the default container (col. 6, lines 23-34).

33. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Riddle, Ham and Nguyen because Nguyen teaches of transferring the project executing the container to a default container if the container is deactivated; and executing the project in the default container would improve system performance and improve recovery techniques by migrating the application executing in the container to another container that can handle the workload in order to maintain a fixed level of

Art Unit: 2195

service.

34. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1), in view of Riddle (US 7,406,522 B2) as applied to claim 1 above, and in view of Kelly et al. (US 6,578,141 B2), and further in view of Parthasarathy et al. (US 7,117,371 B1).

35. As per claim 13, Riddle teaches specifying a maximum outgoing network bandwidth (col. 6, lines 35-41).

36. The combined teaching of McCarthy, Waldspurger, Riddle doesn't explicitly teach that creating the container comprises:

defining a container name; specifying a minimum CPU requirement for the container; specifying a maximum physical memory limit; and specifying a maximum outgoing network bandwidth.

37. However, Kelly teaches specifying a minimum CPU requirement for the container; and specifying a maximum physical memory limit (col. 12, lines 1-14).

38. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Riddle and Kelly because Kelly teaching of specifying minimum CPU and Max memory would improve system efficiency in using resource

Art Unit: 2195

by specifying exactly the amount of resources needed for the container to function.

39. The combine teaching of McCarthy, Waldspurger, Riddle, and Kelly doesn't explicitly teach defining a container name. However, Parthasarathy teaches defining a container name (col. 12, lines 42-45).

40. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Riddle, Kelly, and Parthasarathy because Parthasarathy teaching of defining a container name would improve system management techniques by defining container name, containers can be managed easily.

41. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1), in view of Riddle (US 7,406,522 B2), as applied to claim 14 above and further in view Malhour (US 7,150,020 B2).

42. As per claim 15, the combined teaching of McCarthy, Waldspurger and Riddle doesn't explicitly teach each of the plurality of processes is identified by the same identifier.

43. However, Malhour teaches teach each of the plurality of processes is identified by the same identifier (col. 3, lines 44-50).

Art Unit: 2195

44. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Riddle, and Malhour because Malhour teaching of each of the plurality of processes is identified by the same identifier would improve system performance and efficiency in resource allocation techniques since the processes belonging to one application would have the same identifier, it would manage and facilitate resource allocation for these processes.

45. Claims 17-21, 29 and 31-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1).

46. As per claim 17, McCarthy teaches a computer system, comprising:

a plurality of sets of processors ([0025]; par. [0041]);

a first resource and a second resource (par. [0041], lines 5-18; par. [0044], lines 4-6);

wherein a resource pool is allocated a portion of the first resource and a portion of the second resource, and wherein the resource pool is associated with one of the plurality of sets of processors (par. [0041]; par. [0049], lines 1-7);

a plurality of containers residing in the resource pool, wherein a first container comprises a requirements specification for the first resource for the first container and a requirements specification for the second resource for the first container (Fig. 2A, 203-1, 203-2; par. [0041], lines 5-18; par. [0044], lines 4-6); and

a management interface configured to:

validate that the requirements specification for the first resource does not exceed the allocated portion of the first resource (par. [0036]; par. [0045], lines 1-6; fig. 4A, cumulative allocation of 19 resources), and

Validate the requirements specification for the second resource does not exceed the allocated portion of the second resource (par. [0036]; par. [0041], lines 5-18; par. [0045], lines 1-6; fig. 4A, cumulative allocation of 19 resources; par. [0046]).

47. McCarthy doesn't explicitly teach the plurality of resource pools.

48. However, Waldspurger teaches a plurality of resource pools (col. 5, lines 44-48; col. 6, lines 8-15; col. 7, lines 46-60; col. 8, lines 1-50; fig. 1, VMM1-VMMn).

49. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of McCarthy of logical partition and resource allocation and Waldspurger teaching of system resource virtualization through the use of VMM would allow the system to expand to show the possibility of having more resource pools and more partition that can further allocate resource.

50. As per claim 18, McCarthy teaches a database configured to track: allocation of the first resource; allocation of the second resource; the requirements specification of the first resource for the first container; and the requirements specification of the second resource for the first

container (fig. 4A, elements: partitions, priority and cumulative allocations of 19 resources).

51. As per claim 19, McCarthy teaches wherein the second container comprises a requirements specification the first resource for the second container and a requirements specification for the second resource for the second container (fig. 4A, elements: partitions, priority and cumulative allocations of 19 resources).

52. As per claim 20, McCarthy teaches the usage of the first resource and the second resource by the first container and the second container is determined using fair share scheduling (par. [0026], lines 1-4; par. [0038], lines 1-3; par. [0038], lines 12-17).

53. As per claim 21, McCarthy teaches the management interface is configured to modify the requirements specification for the first resource for the first container (par. [00027], lines 1-23; par. [0043]; par. [0044]; par. [0045]).

54. As per claim 29, the combined teaching of McCarthy and Waldspurger doesn't explicitly teach that the management interface is further configured to discover the first resource and the second resource.

55. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to conclude from McCarthy's teaching that in order for the partition load manager (PLM) to allocate different resources to each partition, PLM must discover the

Art Unit: 2195

resources through knowing their availability in order to grant or deny the allocation and same goes for Waldspurger teaching of VMM which is known to one of ordinary skill in the art that in any system allocation of resources start first by discovering the availability of the resources, then the allocation process.

56. As per claim 31, McCarthy teaches the first resource is at least one selected from the group consisting of a central processing unit (CPU), physical memory, and bandwidth (par. [0041], lines 11-18; par. f0044)).

57. As per claim 32, McCarthy teaches a network system having a plurality of nodes (par. [0018]; lines 1-9), comprising:

- a plurality of sets of processors ([0025]; par. [0041]);

- a first resource and a second resource (par. [0041], lines 12-18; par. [0044], lines 4-6; par. [0049], lines 1-7);

- wherein a resource pool is allocated a portion of the first resource and a portion of the second resource and wherein the resource pool is associated with one of the plurality of sets of processors (fig. 2A, 200; par. [0041]; par. [0044]; par. [0049]; par. [0043], lines 9-12);

- a plurality of containers residing in the resource pool, wherein a container comprises a requirements specification for the first resource for the container and a requirements specification for the second resource for the container (par. [0044], lines 4-6); and

- a management interface configured to:

- Validate the requirements specification for the first resource does not exceed the

Art Unit: 2195

allocated portion of the first resource (par. [0036]; par. [0045], lines 1-6; fig. 4A, cumulative allocation of 19 resources); and

Validate the requirements specification for the second resource does not exceed the allocated portion of the second resource ((par. [0036]; par. [0041], lines 5-18; par. [0045], lines 1-6; fig. 4A, cumulative allocation of 19 resources; par. [0046]).

wherein the first resource is located on any one of the plurality of nodes, wherein the second resource is located on any one of the plurality of nodes, wherein the resource pool is located on any one of the plurality of nodes, wherein the container is located on any one of the plurality of nodes, wherein the management interface executes on any one of the plurality of nodes (par. [0018], lines 26-29; par. [0021], par. [0022]).

58. McCarthy doesn't explicitly teach the plurality of resource pools.

59. However, Waldspurger teaches a plurality of resource pools (col. 5, lines 44-48; col. 6, lines 8-15; col. 7, lines 46-60; col. 8, lines 1-50; fig. 1, VMM1-VMMn).

60. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of McCarthy of logical partition and resource allocation and Waldspurger teaching of system resource virtualization through the use of VMM would allow the system to expand to show the possibility of having more resource pools and more partition that can further allocate resource.

Art Unit: 2195

61. Claims 22 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1) as applied to claim 17 above, in view of Sankaranarayan et al. (US 6,799,208 B 1).

62. As per claim 22, the combined teaching of McCarthy and Waldspurger doesn't explicitly teach that the requirements specification for the first resource for the first container and the requirements specification of the second resource for the first container are included in a container definition of the first container.

63. However, Sankaranarayan teaches the requirements specification for the first resource for the first container and the requirements specification of the second resource for the first container are included in a container definition of the first container. (abs., lines 9-23; fig. 5).

64. It would have been obvious to one of ordinary skill in the art at the invention was made to combine McCarthy, Waldspurger and Sankaranarayan because Sankaranarayan teaching of the first portion of the first resource is modified using schedule change job functionality would improve system performance and flexibility by modifying first resource.

65. As per claim 28, McCarthy doesn't explicitly teach a first management utility configured to manage the first resource; and a second management utility configured to manage the second resource, wherein the management interface is further configured to interface with the first management utility and the second management utility to manage the portion of the first resource

and the portion of the second resource allocated to the resource pool.

66. However, Sankaranarayan teaches a first management utility configured to manage the first resource (fig. 2, 104(1)); and

a second management utility configured to manage the second resource (FIG. 2, 104(2)), wherein the management interface is further configured to interface with the first management utility and the second management utility to manage the portion of the first resource and the portion of the second resource allocated to the resource pool (FIG. 2, 102; col.2, lines 43-48; col. 2, lines 60-67; col. 8, lines 18-31).

67. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger and Sankaranarayan because Sankaranarayan teaching of a first and a second management utility to manage first and second resource and the management interface interfaces with both utilities in order to manage resource allocation would improve system performance and efficiency in resource allocation techniques by providing a structured system and that functionality is divided upon different component of the system improve system performance and accuracy in its functions.

68. Claim 30 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A1), in view of Waldspurger (US 7,433,951 B1) as applied to claim 17 above and further in view of Shuster (US 7,412,514 B2).

Art Unit: 2195

69. As per claim 30, McCarthy teaches the first container comprises:

a container name (fig. 2A, elements: partition 1, partition 2 ... partition N); a minimum CPU requirement for the container (par. [0044], lines 4-6); a maximum physical memory limit (par. [0044], lines 4-6).

70. The combined teaching of McCarthy and Waldspurger doesn't explicitly teach specifying a maximum outgoing network bandwidth. However, Shuster teaches specifying a maximum outgoing network bandwidth (col. 5, lines 62- 64).

71. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger and Shuster because Shuster teaching of specifying a maximum outgoing network bandwidth would improve system performance and efficiency in allocating and regulating system resource.

72. Claims 23-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy et al. (US 2003/0037092 A 1), in view of Waldspurger (US 7,433,951 B1) as applied to claim 17 above, and in view of Kalhour (US 7,150,020 B2).

73. As per claim 23, McCarthy teaches a project configured to execute in the first container (par. [0004], lines 6-14).

Art Unit: 2195

74. The combined teaching of McCarthy and Waldspurger doesn't explicitly teach the project corresponds to a network-wide administrative identifier used to identify related processes.

75. However, Kalhour teaches the project corresponds to a network-wide administrative identifier used to identify related processes (col. 3, lines 44-50).

76. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teaching of McCarthy, Waldspurger and Kalhour because Kalhour teaching of the project corresponds to a network-wide administrative identifier used to identify related processes would facilitate resource allocating management and it would improve system efficiency of managing scheduling by identifying related processes.

77. As per claim 24, McCarthy teaches the amount of the first resource used to execute the project in the first container does not exceed the portion of the first resource allocated to the first container (par. [0045], lines 5-6).

78. As per claim 25, McCarthy teaches the amount of the first resource used to execute the project in the first container does not exceed the requirements specification of the first resource for the first container (par. [0045], lines 5-6).

79. As per claim 26, McCarthy teaches the management interface is configured to track usage of the first resource and the second resource by the project (par. [0032], lines 1-16; par.

Art Unit: 2195

[0037]).

80. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over in view of Waldspurger (US 7,433,951 B1) and in view of Kalhour (US 7,150,020 B2). As applied to claim 23 above and further in view of Krishnaswami et al. (US 2005/0091346 AI).

81. As per claim 27, McCarthy teaches the project is placed in the first container by a user (par. [0005], lines 1-5).

82. The combined teaching of McCarthy, Waldspurger and Kalhour doesn't explicitly teach the user is listed on an access control list associated with the container. However, Krishnaswami teaches the user is listed on an access control list associated with the first container (par. [0059], lines 1-10).

83. It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine McCarthy, Waldspurger, Kalhour and Krishnaswami because Krishnaswami teaching of the user is listed on an access control list associated with the container would improve system security and system efficiency since it control the access of which user can modify the container, this technique would prevent the system from unwanted intruders that can harm the system.

Response to Arguments

84. Applicant's arguments with respect to claims 1-32 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

85. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US 6789156 B1 teaches Content-based, transparent sharing of memory units.

US 6633916 B2 teaches Method and apparatus for virtual resource handling in a multi-processor computer system.

US 6944699 B1 teaches System and method for facilitating context-switching in a multi-context computer system.

86. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CAROLINE ARCOS whose telephone number is (571)270-3151.

The examiner can normally be reached on Monday-Thursday 7:00 AM to 5:30 PM.

87. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on 571-272-3756. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2195

88. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Meng-Ai An/
Supervisory Patent Examiner, Art Unit 2195

/Caroline Arcos/
Examiner, Art Unit 2195